

Appl. Ser. No.10/664,395  
Examiner: LAVARIAS, Arnel C.  
Response to Final Office Action dated October 28, 2005

VQL-P-P6

### REMARKS

Applicants wish to thank Examiner Lavarias for the courtesy extended Applicant's attorney in a telephone interview on January 10, 2006.

In the interview, claim 1 and the *Shanks* patent were discussed. Applicants' attorney proposed to amend claim 1 to clarify that the liquid in the optically active device comprises randomly oriented and positioned molecules, as distinct from the liquid crystals disclosed in the *Shanks* patent, which include molecules having orientational order. B. Saleh et al., "Fundamentals of Photonics", John Wiley & Sons, New York 1991 p. 227 (specifically distinguishing liquid crystal from liquid on this basis). Examiner Lavarias indicated that this amendment may overcome the *Shanks* patent, but may also present a new issue. Thus, Applicants are submitting concurrently herewith a Request for Continued Examination.

### Claims

Claims 1, 2 and 4-41 are pending in this application, including independent claims 1, 7, 17, 19, 23, 25, 26, 27 and 41. Applicants acknowledge the allowance of claims 7, 19-22 and 35-39.

Claims 9, 10, 13, 29, 30 and 32-34 are objected to, but would be allowable if rewritten in independent form. Claim 32 has been rewritten in independent form and is believed to be allowable. No new matter has been added.

Independent claim 25 has been canceled without prejudice. Independent claim 17 has been amended to depend from claim 1. Independent claims 1, 23, 26, 27 and 41 have been amended to clarify that the liquid in the optically active device comprises randomly oriented and positioned molecules. Any person skilled in this art would know that this is an inherent quality of liquid, as set forth in "Fundamentals of Photonics" at p. 227 (cited by the

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Examiner). No new matter has been added.

#### Traversal of Claim Rejections

Claim 40 stands rejected under 35 U.S.C. §112, first paragraph on grounds that the specification does not disclose adjusting the polarizer until maximum extinction is reached. Applicants disagree because the term "maximum" and "greatest" are not deemed to have a different meaning. Notwithstanding, claim 40 has been amended to be consistent with the specification, as recommended by the Examiner. Applicants respectfully request reconsideration and withdrawal of this rejection.

With regard to the remaining rejections, in addition to the arguments set forth herein, Applicants refer the Examiner to the arguments set forth in Applicants' response filed August 17, 2005.

Claims 1, 2, 6, 12, 23, 25-28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Shanks*. Applicants respectfully request reconsideration of this rejection. *Shanks* does not disclose, teach or suggest use of a liquid comprising randomly oriented and positioned molecules, as recited in independent claims 1, 23, 26 and 27. Instead, the disclosure in *Shanks* is limited to use of liquid crystals, which include molecules having orientational order. "Fundamentals of Photonics" at p. 227. Therefore, independent claims 1, 23, 26 and 27, and all claims that depend therefrom, recite an element that is not disclosed in *Shanks*. Accordingly, the rejection under 35 U.S.C. §102(b) must be withdrawn.

Claims 17 and 18 stand rejected under 35 U.S.C. §102(b) as being anticipated by *Reznik* et al. Applicants respectfully request reconsideration of this rejection. Claim 17 has been amended to depend from claim 1. Claim 18 depends from claim 17. Similar to deficiencies in the *Shanks* patent, the *Reznik* patent does not disclose, teach or suggest use of an optically active

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liquid having randomly oriented and positioned molecules as recited in claim 1. Instead, *Reznik* discloses "transparent phase-rotating dispersive mediums", such as liquid crystal, which has molecules with orientational order. Therefore, claim 1 and dependent claims 17 and 18 contain elements not disclosed in the *Reznik* patent. Accordingly, this rejection must be withdrawn.

Claims 4-5 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Shanks*. Applicants respectfully request reconsideration of this rejection. These claims depend from independent claims 1 and 27, respectively, and are believed to be patentable over *Shanks* for the same reasons set forth for claim 1 above. Further, the Examiner acknowledges that *Shanks* does not disclose an optically active liquid comprising corn syrup or a sucrose solution, but asserts that it would have been obvious to substitute corn syrup or a sucrose solution for the liquid crystals disclosed in *Shanks*. Applicants respectfully disagree. The randomness of the claimed liquids permits use in a color filter with no consideration beyond the chemical composition of the liquid. There is no need for liquid crystals or electricity to orient the molecules in any particular way. Further, because the optically active liquid does not depend on orientation of its molecules, the polarized light traveling through the liquid is dependent only on the distance traveled, and not the direction. This permits the color filters to be used with systems that do not use collimated beams of light. In addition, liquid crystals and the attendant required components are substantially more expensive than the liquids called for in the claims. It would therefore not have been obvious to substitute a liquid having randomly oriented and positioned molecules for the liquid crystals disclosed in *Shanks*. Applicants therefore believe that independent claims 1, 23, 26, 27 and 41, and all claims depending therefrom, are patentable over *Shanks*.

Claim 8 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Shanks* in view of *Reznik*. Applicants respectfully request reconsideration of this rejection. Claim 8

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depends from claims 1 and 6, and is believed to be patentable over *Shanks* and *Reznik* either alone or in combination for all of the reasons set forth above.

Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Shanks* in view of *Kiss* (WO02/082169 A1). Applicants respectfully request reconsideration of this rejection. Claim 11 depends from claim 1, and is believed to be patentable over *Shanks* by itself for all of the reasons set forth above. *Kiss* is cited only for disclosing an element in a color effects device that is removable. However, *Kiss* does not overcome the deficiencies of the *Shanks* patent noted above. Therefore, this rejection must be withdrawn.

Claims 14-16, 24 and 41 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Shanks* in view of *Carmichael* (WO01/50187 A1). Applicants respectfully request reconsideration of these rejections. Claims 14-16 and 24 depend from independent claims 1 and 23, respectively, are believed to be patentable over *Shanks* by itself for all of the reasons set forth above. Independent claim 41 also recites a liquid of randomly oriented and positioned molecules, and is believed to be patentable over *Shanks* for the reasons set forth above. *Carmichael* is cited only for disclosing a liquid crystal optical filter controlled by a remote transmitter, which may be used with image projection systems, and thus does not overcome the deficiencies in *Shanks*. *Carmichael* does not disclose, teach or suggest the use of a liquid having randomly oriented and positioned molecules. Therefore, this rejection must be withdrawn.

For the reasons set forth above, Applicants submit that claims 1-41 are allowable and request that this case be passed to issue. However, if any issue remains to be resolved, Applicants request that the Examiner telephone the undersigned.

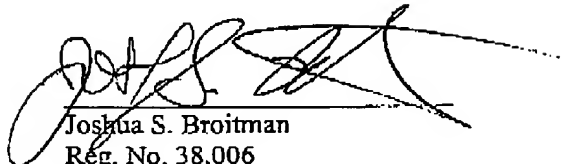
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Respectfully submitted,

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Date



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